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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Michael Castillo

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EXAMINER

PHILIPPE, GIMS S

ART UNIT

PAPER NUMBER

2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/600,518

Applicant(s)

CASTILLO ET AL.

Examiner

Gims S. Philippe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-16 is/are allowed.
- 6) ☒ Claim(s) 1-13, 17-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. Applicant's amendment received on January 16 2007 in which claims 1, 21 and 27 were amended has been fully considered and entered but the arguments are moot in view of the new ground(s) of rejection.

Note: The new ground of rejections is rendered necessary in view of a newly found reference during an updated search. The examiner apologizes for the inconvenience, which that may cause the Applicant because of the previously indicated allowable claims.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61; 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in

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memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

3. Claims 27-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 27 and 30 define an article of manufacture comprising a machine-accessible medium embodying functional descriptive material. However, the claim does not define **a computer-readable medium or memory** and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed article of manufacture comprising a machine-accessible medium can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

The examiner suggests amending the claim to embody the program on "**computer-readable medium**" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claims 28-29 and 31-32 are rejected by dependency to claims 27 and 30.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-13, 17-28, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku (US Patent no. 6,671,408) in view of Cheney et al. (US Patent no. 5,668,599).

Regarding claims 1, 21 and 27, Kaku discloses the same article, system and method comprising selecting a base frame prior to decompression other frames of the group of frames (See Kaku col. 1, lines 35-44), and providing the decompressed base frame to a display device to display prior to decompressing the other frames of the group of frames (See col. 1, lines 45-47, col. 2, lines 18-27, and col. 4, lines 66-67 and col. 5, lines 1-4). The applicant should note that the "1 frame" in Kaku is the base frame and since each frame is decompressed 1 frame at a time, the group of frame forming the motion image as noted in col. 5, lines 16-19 of Kaku. The applicant should note that the step of suspending the compression in col. 5, line 1 is prior to the decompression.

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It is noted that although Kaku suggest MPEG compression (See Kaku col. 11, lines 41-52), it is silent about selecting the frame wherein at least one frame in the group of frames is encoded with an encoding technique utilizing bi-directional encoding.

However, Cheney discloses a decompression wherein at least one frame in the group of frames is encoded with an encoding technique utilizing bi-directional encoding (See Cheney col. 14, lines 21-23, lines 37-44).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Kaku' selection method by incorporating Cheney's decompression wherein at least one frame in the group of frames is encoded with an encoding technique utilizing bi-directional encoding. The motivation for performing such a modification in Kaku is to be able to decode both past and future reference picture before decoding the B-frame as taught by Cheney (See Cheney col. 14, lines 16-20). The applicant should note that in general in MPEG compression bi-directional encoding of a frame is usually performed.

As per claims 2 and 28, Kaku further discloses switching channel (See Kaku col. 5, lines 31-33).

As per claim 3, to provide the base frame as a result of powering up is considered an inherent feature in any computer system processing such a method as claimed in claim 1.

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As per claims 5, 17-18, and 30, most of the limitations of these claims have been noted in the above rejection of claims 1 and 2. In addition, the indication mode switch change unit 60 of fig. 7 will receive the indication to perform the change to the second channel; and the display prior to decompression is noted in col. 6, lines 7-17.

As per claim 6-7, 19-20, Kaku suggests MPEG encoding and proposes a read process of 15 frames. It can be concluded that the data reproduced from the memory card 36 can be a television program (See col. 6, lines 55-67 and col. 7, lines 1-23).

As per claim 8-13 and 31, the second channel selection is considered met by the mode change switch 60 along with the system controller 54.

As per claims 22-23, and 25-26, Kaku further provides a computer system as noted in col. 6, lines 44-46.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 4, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku (US Patent no. 6671408) in view of Ben-David et al. (US Patent Publication no. US 2003/0014748 A1).

Regarding claims 4, 29 and 32, Kaku discloses the same limitations as previously set forth in the rejection of claims 1 and 27.

It is noted that although Kaku provides a base frame from an MPEG and JPEG (See Kaku col. 11, lines 38-46), it is silent about a frame from M-JPEG and satellite base frame.

However, Ben-David provides a base frame from one of a group comprising MPEG, M-JPEG, and a digital satellite (See Ben-David [0085]).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Kaku's selection by incorporating Ben-David's proposed base frame from one of a group comprising MPEG, M-JPEG, and a digital satellite. The motivation for performing such a modification in Kaku is to duplicate data line in order to form wider lines that are less sensitive to DCT-based compression.

Allowable Subject Matter

8. Claims 14-16 allowed.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Paz et al. (US Patent no. 7103099) teaches selective compression. The applicant should note that Paz et al teaches channel switching in col. 5, lines 32-67.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Gims S Philippe
Primary Examiner
Art Unit 2621

GSP

March 27, 2007